

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
14 July 2005 (14.07.2005)

PCT

(10) International Publication Number
WO 2005/062915 A3

(51) International Patent Classification:
H04B 1/38 (2006.01)

(21) International Application Number:
PCT/US2004/043258

(22) International Filing Date:
22 December 2004 (22.12.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/532,098 23 December 2003 (23.12.2003) US

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

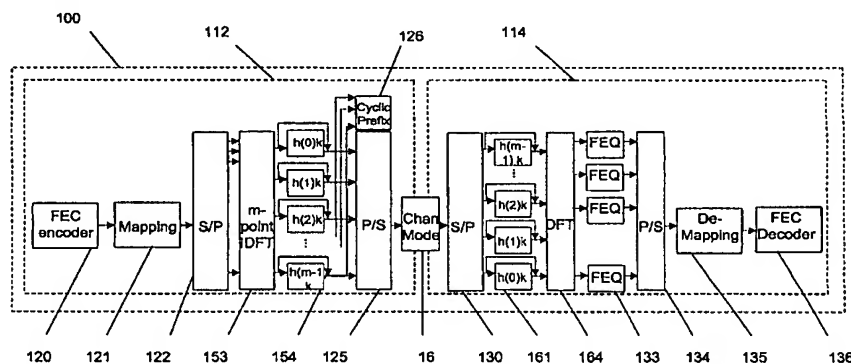
Published:

- with international search report

(88) Date of publication of the international search report:
21 December 2006

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **POWER LINE COMMUNICATIONS DEVICE IN WHICH PHYSICAL COMMUNICATIONS PROTOCOL LAYER OPERATION IS DYNAMICALLY SELECTABLE**



(57) Abstract: A power line communications ("PLC") transmitter and receiver device includes a physical communications protocol layer that provides for dynamic selection of a communications signal transmission operating mode from a plurality of such modes, where each has a corresponding transmission data structure that is based on characteristics of the electric power distribution network to which the PLC device is to be coupled and also the communications protocol profile requirements for the network.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/43258

A. CLASSIFICATION OF SUBJECT MATTER

IPC: H04B 1/38(2006.01)

USPC: 375/222

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 375/222

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
ADSL booksElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Google, Scirus, IEEE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X — Y	US 20010028678 (KATO et al) 08 May 2001 (08.05.2001) figures 1-3 paragraphs [0001]-[0060]	1-7 and 11 — 8-10
X — Y	Lee et al. "HomePlug 1.0 powerline communication LANs - protocol description and performance results", International Journal of Communication Systems Volume 16, Issue 5, Date: June 2003, Pages: 447-473	1-7 and 11 — 8-10
Y	US 7,075,941 B2 (LIU et al) 01 March 2001 (01.03.2001) title abstract columns 1-50	8-10
Y	Rauschmayer, "ADSL/VDSL Principles", Macmillan Technical Publishing, 1999, page 171	1-11
Y	ITU "G.992.1 Recommendation", ITU, 06/1999, pages: 9-13;	1-11

☒ Further documents are listed in the continuation of Box C.☐ See patent family annex.

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Date of the actual completion of the international search

02 August 2006 (02.08.2006)

Date of mailing of the international search report

28 SEP 2006

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US04/43258

C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	Gardner "HomePlug Standard Brings Networking to the Home ", Communication Systems Design December 2000. Volume 6, Number 12	1-11
Y	US 20020006167 A1 (McFarland) 20 April 2001 (20.04.2001) paragraphs [0015]-[0054]	1-11
Y	US 5,909,463 A (JOHNSON et al) 04 November 1996 (04.11.1996) figures 1 and 2 columns 1-5	1-11
X	Lee et al. "HomePlug 1.0 powerline communication LANs - protocol description and performance results version 5.4", International Journal of Communication Systems, Date: 2000, Pages: 1-25	1-7 and 11
Y		8-10